## ABSTRACT OF THE DISCLOSURE

A method of identifying a failing PCI slot In a computer having a peripheral component interconnect (PCI) system having a host bridge coupling a plurality of PCI slots of a PCI bus to a processor where the computer uses firmware to access the base address registers. A firmware maintained PCI resource allocation map is created which addresses for PCI slots associated with base address registers and sizes of address ranges for these addresses are mapped. The firmware maintained PCI resource allocation map is updated upon the occurrence of at least of firmware being called to execute at least one of a hot plug operation and a PCI configuration space transaction. Upon the host bridge logging an error address due to a failing PCI slot, the failing PCI slot is identified from the information in the firmware maintained PCI resource allocation map.